MDARC CARRIER

Volume XLV Number 2 WWW.MDARC.ORG February 1998

February Meeting

Friday, February 20
8:00 PM

***

Our Savior's Lutheran Church
1035 Carol Lane
Lafayette, CA

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Presidential QRM

By Sam Lipson, KO6JR

January is over and the rains are still coming. Now is a great time for indoor projects. Many shack projects which we put off because we wanted to be outside can now be done. Go and build that kit you keep putting off. Have some fun putting together something you are going to use while you learn how it works. Kits are great activities for new and old ham, young and old alike. Show someone what you are doing and get them interested in amateur radio as well.

The rains also bring the potential for flooding, power outages and the like. Keep your batteries charged and help out as necessary. This time of year here is when we are called out as ARES/RACES volunteers. If you can help, when called, please participate. Your help is greatly appreciated by our local officials and the public at large.

Next month brings the semiannual auction. See what "junk" you have laying around which may be of benefit to others. Bring it to the auction and get it out of your garage/shack. Someone else may really want what you have.

Have fun with our hobby and I hope to hear or see you on the air soon.

73, Sam

From the Repeater Committee

By Jim Brunk, Chairman

Signal Strength

The committee would like to thank Tom, KO6RO, for a signal report. This was the only one received since the last newsletter. The report form is printed elsewhere in the *Carrier.* It is also found on the Design Link BBS in the repeater section and is on the MDARC web page at the specific address of http://www.mdarc.org/rrrcs1.html. If you encounter signal strength of less than S9 or have any other comments, send in a report.

These surveys allow us to find out where the poor locations exist. With this feedback, we can plan for future system enhancements. Help us out.

This Year's Projects

At the January general meeting the membership approved the 1998 budget. This approval allows the committee to complete several projects and start some improvement upgrades to the systems. Foremost is the completion of the rebuild on Mt. Diablo caused by the storm and subsequent equipment move. Most of the project is complete. We are waiting for the other repeaters to be moved. When that happens, the rest of the antenna systems will be completed. The enhancement of the ATV repeater will be finished. The link with Mt. Oso will increase availability of the system to fringe areas and allow us to link with the southern part of the state. After several years talking about replacing the 220 machine, this year it will be. We are also adding to the linking capabilities of the controller.

Once again: If you have ideas on how we can make this system of repeaters and packet nodes the best in the area, let us know. We want the MDARC systems to be known as the best in the west!

Mt. Diablo Amateur Radio Club W6CX

P.O. Box 23222
Pleasant Hill, CA 94523
(510) 932-6125

The Carrier is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and space is available.

All material must be submitted to the editor by the first of day of the month of publication. Material is accepted on a first-in, first-out basis. Articles and other material may be submitted via Internet email to w6uv@dnai.com (preferred), or delivered to the editor at the address listed below. Material will be accepted in plain ASCII, Word for Windows, or WordPerfect format. Material may also be submitted as hardcopy.

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2236 Tahiti Drive	w6uv@dnai.com
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Publicity

By Donna Cook, KE6PPM

There are thirteen newspapers and eleven local access television channels in the area which will be receiving monthly announcements of MDARC meetings. The monthly meeting notices will be published in the Datebook or Community Calendar sections of the newspapers, and will read as follows:

The Mount Diablo Amateur Radio Club meets at 8 p.m. on the third Friday of each month at Our Savior's Lutheran Church, 1035 Carol Lane, Lafayette. Licensing examinations begin at 6:00 p.m. MDARC is a non-profit organization which provides radio communication for a variety of public events to provide a service to the community and to maintain readiness to assist in the event of a major disaster. For more information, call 932-6125 or see website at www.mdarc.org. New members are welcome, licensed or unlicensed.

I would like to request a favor of anyone who spots one of these announcements. Would you please send me an e-mail or give me a call to let me know when and where you saw the announcement? If you could clip it out and send it to me, that would be even better. My e-mail address is cookL@pacbell.net and my evening phone number is 682-9810. Thanks!

MDARC General Meeting Minutes

January 16, 1998

The meeting was called to order at 8 p.m. by President Sam, KO6JR. Visitors were introduced and upgrades include Joey Simon who is now an Extra at age eleven. Congratulations!

It is time to renew membership for 1998. Please see Pete Smith, W6NZY, to renew, and indicate if you are able to obtain the *Carrier* from the web to save the postage. Renewal deadline is March 1.

W6CX awards for outstanding contributions to MDARC in 1997 were given to the following members who were not in attendance at the holiday social: Jim Wallace, WB6LQG; Tony Stanton, AC6GM; and Jerry Gardner, W6UV; and the Kilroy Key was awarded to Gerry White, WB6IZE, for his dedication in maintaining video equipment at monthly meetings and Pacificon.

There is still an open position for door prize coordinator for the monthly meetings. Donna Cook, KE6PPM, will be handling publicity and will send meeting notices to eleven newspapers and eleven cable television stations throughout the East Bay. Feedback from members who see the announcements would be greatly appreciated.

Motion made, seconded and carried to approve the November minutes as published.

Greg Estep, KE6VTA, announced that the monthly Pacificon meeting will be held at 8:00 a.m. on Saturday at Baker's Square in Concord.

The next RACES training will be held January 24, sponsored by East County, and a Disaster Preparedness Fair will be held on February 7 at County East Mall in Antioch. On February 28, West County will conduct a message center and shadowing program. Central County will sponsor the program on April 11.

The County Office of Emergency Services is now under the Contra Costa County Sheriff's Office. All RACES cards will now expire at the end of the Sheriff's term in office.

Get well wishes to Bob Williams, N6UTX, and Frank Calton, N6GQ.

The Repeater Operations Committee would like input from members as to what they wish to see in repeater capabilities. Installation is temporarily suspended, awaiting action from other groups.

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Catch it - Catch it—Dead End or Godsend?

By Jerry Wheeler, W6TJP

[From Worldradio, February 1998]

In the August 1997 issue of ***Worldradio*** an article by Dave Kelley, AI7R, astonished us with his unhedged condemnation of the Code Quick method. Although well meant, his comments "NEVER use crutches" and "THIS IS A VERY BAD way to learn the code," demonstrated, we believe, a misleading and serious misunderstanding of the code learning process. We were left to wonder just what scientific research provided justification for Mr. Kelley's dazzling assertions? The editors of this magazine are to be congratulated for their willingness, in this debate, to air both sides. This article will demonstrate why "Catch it-Catch it" and other such "crutches' enable fledgling amateurs to become truly code proficient in a fraction of time compared to traditional or even "Farnsworth" approaches.

0-5 wpm in only a year!

When, in 1950, Mr. Tom Thorpe taught the author Morse Code at West Phoenix High School, he played the code on a military surplus machine. A long tape with holes whirled around, producing the code while the RPM of the spool set a 5 wpm speed. Painfully and fruitlessly in front of that ancient device, our class assembled for countless hours. In this method the student was told to associate the sound of the character being sent in Morse with the elusive letter. While this method could be praised for keeping a group of high schoolers off the streets, the endless parade of dabs and dits produced few amateurs! In retrospect, I remember that although I never seemed to make much progress, I was among the best and after a year, I successfully passed my Novice tests. But code never came easily and as Mr. Kelley says, it wasn't much fun.

Payday today and other catchy phrases

Then one day, Mr. Thorpe walked through the classroom while the "Q" was sounding and playfully exclaimed, "Hey guys, listen to the Q. it says, 'payday today!' You'll never forget your payday will you?" From that instant I never again struggled with the letter Q, it was always there instantly. However, all the other characters continued to conceal their identities from me. Practice as I would, it took another ten years before I gained enough proficiency to squeak through the 13 wpm test. Working CW was always a white knuckle experience. Tense and rigid, my body seemed intent on flexing every sinew and popping every ligament. Even this maximum exertion rarely provided a satisfactory QSO, so I mainly stuck to phone.

And then there was one!

In the late 1970s at Huntington School in San Marino, CA, 57 enthusiastic students agreed to sacrifice six weeks of their summer, all morning long, to the establishment of a school radio club and station. Excitement and anticipation filled the air. The eager troop began stringing dipoles obtaining gear and pounding the books. While with usual speed the theory fell into place, the code began to take its toll. One by one discouraged and frustrated kids disappeared from the roster until at last only seven starters completed the requirements for Novice. Sadly, when the tickets arrived two months later, one lone fledgling knew enough code to man the radio club station! What made the learning of code so nearly impossible for so many? Negative experiences launched your author's life quest and doctoral level research to solve that puzzle. The following conclusions represent his answer.

Why code stops many cold

Our brains demonstrate the amazing work of a master creator. They are designed to handle thousands of tasks simultaneously, each part functioning independently and co-dependently. In order to receive code, the sound needs to be noticed, determined important and processed for meaning. When we first hear code the mind asks itself, "What manner of audio information is this?" Not recognizing it as language, the sounds are mistakenly routed to the non-language auditory area as though they were environmental noises. The grey matter in this region is extremely efficient for recognizing thuds, clunks, screeches and squeals, but quite inadequate for processing language. The functioning of this section of the brain appears to be sound specific. It is looking for exact matches with stored experiential information. Scanning the environment and searching for potential hostile noises it locates a sound it deems worthy of notice, notifies the visual part of the brain that trouble might be brewing, collects data and quickly determines its importance hopefully in time to get you out of the way of the approaching truck. Literally hundreds of thousands of messages pass through this portion of the brain every day. Most are ignored as irrelevant.

What's a 3 wpm window?

If we try to copy code in this non-language portion of our minds as environmental noises, symbols must be learned EXACTLY the way they are to be received. As many of us have discovered, the process is arduous and often exasperating. This area of the brain does not appear to possess the ability to learn at one speed or frequency and then decipher at another. Consequently, we learn code at one speed, say 20 wpm but are out to sea when someone sends us code at 5 or 13 wpm. If we learn code by listening to the sound of the characters and then attempt to associate the letter with those sounds, we are locked into a dismal 3 wpm "window." (Hams often refer to these windows as plateaus) If we speed up or slow down, we no longer recognize the characters. Thus, we might get through an exam if our code "window" matches the test oscillator, but we don't become CW proficient unless we set out on the grueling course to learn six or more complete sets of code. As so many of us know by personal experience, this is just too painful and most who try it give up in disgust. Who wants to spend the rest of his life studying code?

Speech—man's most amazing ability

Now compare that scenario with what happens in the amazing language part of our brain. One aspect of man which makes him unique from all the animal kingdom is his ability to receive and process speech information. Scientists tell us that language functions are strung all over our skulls where thousands of circuits connect and constantly communicate with each other. As a result, this most powerful part of our mental function is able to hear and decipher meaning from a child's high-pitched whine, the thick accent of a Jamaican fisherman, the bass roar of a Marine drill

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MDARC General Meeting Minutes

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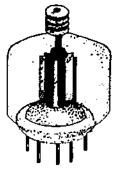
There was some discussion regarding the interaction of official observers with the FCC in resolving intentional disruption of transmissions. Official observers include Don Smith, W6NKF; Jim Tittle, KC6SOE; Dick Schulze, AA6DL; Jay Caldis, KT6Y; and Dick Brown, KT6X. Please contact one of these observers by telephone if future problems arise.

Jim Wallace, WB6LQG, reported that more than 700 test elements were administered in 1997, and it is hoped that a total of 1000 will be reached in 1998. The next six-week class begins on March 17, 7:00 p.m., at the Pleasant Hill Adult Center.

Greg Estep, KE6VTA, outlined the proposed budget for 1998, and Jim Brunk, N6BHX, filled in the details for the Repeater Operations Committee. The motion was made and seconded to approve the formal budget. The floor was opened for discussion. After some discussion, the call for the question was followed by more discussion. A second call for the question resulted in a majority of the seventy-nine members present approving that the vote proceed. The vote to approve the budget passed, although not unanimously.

After a short break, Stu Cannon introduced Ray Riordan, KE6OFI, of East Bay Municipal Utility District, who gave a presentation on emergency preparedness. Meeting adjourned at 10:00.

Respectfully submitted,
Donna A. Cook, KE6PPM
for Paul Dickey, N6JOX



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MDARC Board of Directors Minutes

January 5, 1998

The meeting was called to order by President Sam Lipson, KO6JR, at 7:34 p.m. at the Bakers Square Restaurant. Other officers and directors present: Sect'y Paul Dickey, N6JOX, EC Robert Hampton, KF6FGH, Directors Cal Groom, KE6OEH, Keith Lattin, N6PMF, Ed Ritchie, K6SFD, and John Stuart, KM6QX. Committee Chairmen present: RRRC—Jim Brunk, N6BHX, Public Relations—Donna Cook, KE6PPM, *Carrrier*—Jerry Gardner, W6UV, Social—George Roush, WB6OFH. Others present: Pacificon—Dick Brown, KT6X, RRRG—Howard Burk, KE6PTT, RRRG—Dick Schulze.

George, WB6OFH noted the great Christmas party that was enjoyed in December. He reported on plans for the summer picnic, scheduled for July 18 beginning at 10:00 a.m.

Volunteer cooks for the picnic have been signed up, the Concord Community Park has been reserved and deposit paid.

Sam, KO6JR, discussed corrections of the 1998 Budget: first, the Field Day budget should have been printed as $450 (the same as last year) instead of $150. Secondly, Dick, KT6X noted that expenses seemed to outrun income. The explanation of RRRG expenses was that much of the capital expense represented amounts approved last year but not spent at the time of budget preparation. For example, of the linking project expense of approximately $1,000, $763 had already been spent in 1997. On a motion by Ed, K6SFD, the budget corrections were approved with one abstention, and with the proviso that major expenditures were subject to Board approval at the time. The corrected budget will be presented at the general meeting Jan. 16.

Jim, N6BHX, discussed repeater operations. The RRRG is still looking for signal reports, and Jim thanked those who have responded thus far. He noted that misuse reports should be sent to Don Smith, W6NKF. Jim also discussed some ideas for value-added items for repeater supporters. He noted that the UHF equipment was in the process of being installed.

Donna, KE6PPM, has made some media contacts. She reported that so far, 13 newspapers andd 4 TV stations are willing to publish meeting notices.

Sam, KO6JR, is looking for a volunteer to replace the awards coordinator for meetings.

Robert, KF6FGH, discussed miscellaneous ideas for the EC position. He is looking for ideas (via e-mail) for appropriate emergency operations.

Sam adjourned the meeting at 8:52 p.m. The next Board meeting will be Feb.9.

Respectfully submitted,
Paul Dickey, N6JOX, Secretary

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Norman S. Buell, W6SJH, Silent Key, January 3, 1998

By Dick Schulze, AA6DL

Norm Buell, a member of MDARC, died January 3, 1998 after a long battle with cancer. Norm was born in San Francisco 1914, attended Lowell High School and graduated from Stanford in 1936 with a degree in chemical engineering. Most of his professional career was with Del Monte Foods. He is survived by his wife Mary Buell whom he married in 1936.

Norm built his first crystal set in 1926 and obtained his first license in 1938. He was quite active on the HF bands where he was on the air on a daily basis. He could communicate by CW at over 40 words per minute.

In addition to radio Norm had intense interests in other areas including boating, meteorology, navigation and mathematics and had such proficiency in these areas that he taught classes on these subjects. Norm and Mary for many years were very active in boating but they were not content to merely picnic on the boat. They competed fiercely in predicted log races where a high degree of knowledge of currents, winds, tides, hull speeds and the like is needed.

Norm was active in many amateur radio organizations and was a past president of Society of Amateur Radio Operators, SIRARC, QCWA(Norcal chapter). He gave more to a group than he received. It was a pleasure to have known him.

Catch it - Catch it

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sergeant, or the slow drawl of a Louisiana river boat captain. No one ever needs to teach the difference between fast language and slow language, high pitch or low, our brain just fills in the differences. It can process speech equally well at an agonizingly slow 25 wpm or from a traffic controller's 500 wpm machine-gun-like spiel.

30+ wpm - how does he do it?

The old ham who sits by his radio while code flows at 30 wpm, no doubt receives and processes code in his mental language center. Some can even carry on two conversations at once, one with you, the awestruck ham shack visitor, the other with a CW friend through the transceiver. Somehow for him, the code language became fluent, as easy as English. He feels no struggle, hesitation or tension; how did he do it? It remains a mystery to us how for a small minority of hams the non-language he learned connects to his brain's language center. We don't know how he developed his skill while so many others founder, but we are delighted to report that since 1979, Code Quick has launched tens of thousands of men and women into his world of CW language with the unique sound-alike process. Hundreds of students continue to succeed by following the simple steps found in the Wheeler Applied Research courses and computer programs.

How does CW become language?

To acquire any foreign language, say Spanish, we learn a set of sounds (noises if you will) to represent an idea. Take the sounds, "mi boca" as an example. If we are older than 9 years old we will most likely have to go through the process of saying to ourselves, "Mi boca means my mouth." Every time we hear "mi boca," we think, "my mouth." Those of us who learned a foreign language are familiar with this translation process. If we stick with it, eventually we jump right from the Spanish word to the imaged thought and the English equivalent then drops away. Wallah, we arrive at the point of fluency.

Why do sound-alikes eliminate plateaus?

If we learn code by way of sound-alikes, very much the same process emerges. Using Mr. Kelley's example, "Catch it-catch it" is first learned as a sound-alike to represent the letter "C." In the beginning, the student will hear the code say "catch it-catch it," and will go through some rapid mental gymnastics to remember that those sounds represent "C." Just like the sounds **"mi** boca" represented "my mouth" in the example above, translation was necessary. With practice, the "catchy phrase" disappears into the subconscious and the brain deals with the sound as it would with any other language bit. Once a sound becomes fluent language, it can soon be deciphered at almost any speed. A minimum of processing time, freedom from speed or frequency dependency, long-term retention, and instant comprehension mark our language abilities. Getting all this power working helps us to become code fluent quickly while avoiding failure. That's why so many Code Quick students come to us after a lifetime of struggle to learn that CW can be both fun and rewarding.

In conclusion, the author would like to recommend that you NEVER study code as dahs and dits, dots and dashes, Farnsworth or traditional; THIS IS A VERY BAD WAY TO LEARN THE CODE.

(Editor's note: People have many different learning styles. One person's success may not be another's cup often. We encourage all to find the method that works best for them.)

You are Definitely a Ham If:

By Leo Boberschmidt, N5NU

1. Your latest issue of QST is in the bathroom.
2. You have got at least one old broken Heathkit stored under your bed.
3. You have ever opened your QSL cards before opening your IRS refund check.
4. You always save the cord from any electrical appliance that you are going to throw away.
5. You once named your cat "dummy load".
6. You have seen the Drake twins.
7. You can remember the formula for finding the electrical length of a half-wave dipole in free space, but don't have a clue as to what day your anniversary is on.
8. You have ever tried to convince your wife that the portable generator you want for field day is a necessity for the times when the power goes off.
9. You have ever tried to convince your wife that the "stick-on" antennas are no good, and you really need to drill a 5/8" hole in the top of her new car.
10. You have ever counted more than 100 birds on your antenna at one time
11. You have ever activated your neighbors alarm system from within your shack.
12. You have ever sketched an electrical diagram while in a business meeting.
13. You worry about your antennas when a hurricane is forecast and don't even think of your house.
14. You have ever used the cigarette lighter plug to control the windshield wipers on your car.
15. You have a set of bookends made from old vacuum tubes.
16. You have more than five articles of

clothing with your callsign on them.

17. You know most of your friends by their callsigns but not their names.

18. You planned your wedding and honeymoon around the contest schedule.

19. You have ever destroyed a perfectly good electrical appliance trying to see how it worked.

20. You plan your family vacation to include K5SL, K5NZ, K5JA, etc.

21. You have more than three tie clasps or personal jewelry with radio insignias on them.

22. Your idea of a good time is to be snowed in during the weekend of a major contest with a good supply of frozen pizza and soft drinks.

23. You have ever wondered why your friends at work don't really understand you.

24. You have ever been heard singing in Morse Code while taking a shower.

25. You have ever tapped out the road signs in Morse Code while on a trip.

Setting the RF Gain Control

By Bob Eldridge, VE7BS

[From Worldradio, February, 1998]

Many many years ago I was struck by a simple statement by Art Collins, introducing the concept of single sideband suppressed carrier operation. He said, "If you can hear band noise, you will hear any signal that is strong enough to overcome it. Running the RF gain higher than that will do nothing but harm."

The lore up to that time (the time of Ancient Modulation phone and BFO injection for CW) was "Run the RF gain at maximum and AGC ON for Phone, switch the AGC OFF and control the audio output with the RF gain control for CW." Many operators still do this in these days of SSB and product detectors, and it is not a good idea.

The control labelled 'RF GAIN' often controls only the IF gain. Many modern receivers have no RF amplifier stage, and those that do often have one with relatively little stage gain. The designer these days likes to protect the first mixer from being overdriven, thus keeping spurious mixer products at bay. When you turn the RF gain control counterclockwise on an older receiver, the bias produced for the RF amplifier stage is 'delayed' (doesn't come into action so quickly), but it has an immediate effect on the gain of the intermediate frequency stages.

Audio-derived AGC

I use a Ten-Tec Corsair 2, which develops AGC voltage from the output of the audio demodulator. The S-meter reading goes to zero when the RF gain is turned well down. If I want to make an S-meter reading, as I should to make a comparison between two signals or two antennas, I have to turn the gain up temporarily. Not necessarily to maximum, in fact I never have to turn it to maximum, as there is more gain than I need in the IF stages. In practice I turn up the gain until the loudest signal peaks cease to drive the needle higher.

The more signal applied to any demodulator (mixer) the more likely it is that some distortion will be produced, and distortion of any kind damages readability. Even for a short test period, you want best readability, not most noise, don't you?

There is such a variety of filters and processors in modern receivers that you have to experiment with your own to find the best setting for the RF gain. On strong signals it doesn't make much difference, but on weak signals, whether SSB or CW, the best setting is nearly always somewhere just above the position where band noise is first heard, so that is the place to start (and in most cases that is where you will finish).

If you have narrow CW filters or digital signal processors you may need a slightly higher setting for optimum filter action. But filters sometimes also malfunction if the signal input to them is too high.

Too much signal from the antenna (especially if you live close to a high-powered broadcasting station) will overload the first mixer, and this is best dealt with by switching in front end attenuation. But in my case I get best signal to noise ratio on weak signals by running the front end with no attenuation and finding the optimum setting for the RF gain control. I have the AGC ON and FAST, so if a monster signal comes along my ears are not endangered.

Sometimes you may want to estimate the S/N ratio (in practice more correctly termed the S+N/N ratio) of a signal. If you set the RF gain so you can see an S-meter reading on background noise, and have your AGC on FAST, you can see the difference in dB between signal peaks and the no-signal condition. (Don't assume your S-meter is calibrated for 6dB per S-point though—few are).

When in an extended QSO with a reasonably strong station, all you need do is turn the RF gain down until you hear nothing when the other station pauses, then turn the audio control up for comfortable volume.

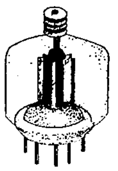
RF-derived AGC

In many receivers the control bias for automatic gain control is derived from the signal before it reaches the audio demodulator. The operating technique is the same. If you can hear band noise you will hear any signal that is strong enough to overcome it, so turn the RF gain down to just-audible band noise and save your ears and your brain.

The difference between AUDIO and RF-derived AGC is in the way the S-meter reads. In the latter type of receiver the RF gain control normally sets the resting bias level for the IF stages and sometimes also the RF stage. If you turn the RF gain down you get a standing reading on the S-meter. If the incoming signal produces more bias than the value you have set with the control, the needle bounces (or in the case of ancient modulation moves to a higher stable reading).

If you want to set the gain by visual observation, as may be useful during an extended QSO, first set the RF gain to maximum and make a note of the peak S-meter reading. Then turn the control counterclockwise until the meter stays stable at that value (get rid of the dips in the signal). When the other station stops transmitting, or pauses, you will hear no more noise than that which was present when he was transmitting.

There are some subtle complications if you are using a BFO to resolve CW or SSB, so be sure you are listening to band noise (static, manmade QRN, etc.) and not to white noise from BFO injection. The internal 'carrier' injected is often of much higher amplitude than is good for reception of weak signals, but that is another subject. You can always momentarily remove the antenna, which removes band noise and leaves internally generated noise there.



Blasts From The Past

California- Feb. 7-8

The California Historical Radio Society (CHRS) and the North California Tube Enthusiasts Group and Vacuum Tube Magazine announce the Bay Area Vacuum Tube Enthusiasts Weekend. More info: CHRS 415.821.9800

Saturday February 7th—Radios and Ephemera Swap Meet: 8-11 AM At the Los Altos Foothill College Parking Lot D located at Highway 280 and Moody Road. Sponsor CHRS. 1-5 PM Dr. Bruce Edgar & other presentations: San Francisco, CA at the Randall Museum, 190 Museum Way. Sponsor Northern California Tube enthusiasts Group

Sunday February 8th 8 AM—5 PM Tube School for Hi-Fi and Guitar Amplifiers and Vacuum tube Products Trade Show. Location: SF Airport Clarion Inn Route 101 and Millbrae Avenue, Millbrae, CA

For fees and other info: Vacuum Tube Valley 1095 Duane Ave, Suite 106, Sunnyvale, CA 94086. Phone 408.733.6146

Airplane Games

A programmer and an engineer are sitting next to each other on a long flight from LA to NY. The Programmer leans over to the Engineer and asks if he would like to play a fun game. The Engineer just wants to take a nap, so he politely declines and rolls over to the window to catch a few winks.

The Programmer persists and explains that the game is really easy and a lot of fun. He explains I ask you a question, and if you don't know the answer, you pay me $5.00. Again the Engineer politely declines and tries to get some sleep.

The Programmer, now somewhat agitated, says "Ok, if you don't know the answer you pay me $5.00, an if I don't know the answer, I will pay you $50.00! This catches the Engineer's complete attention, and he sees no end to this torment unless he plays, so he agrees to the game.

The Programmer asks the first question. "Whats the distance from the earth to the moon?" The Engineer doesn't say a word, reaches into his wallet, pulls out a five dollar bill and hands it to the Programmer. Now, it's the Engineer's turn. He asks the Programmer: "What goes up a hill with three legs, and comes down with four?" The Programmer looks at him with a puzzled look. He takes out his laptop computer and reaches all his references He taps into the Airphone with his modem and searches the Net and the Library of Congress. Frustrated, he sends E-mail to all his co-workers and friends he knows, all to no avail.

After over an hour, he wakes the Engineer and hands him $50.00. The Engineer politely takes the $50.00 and turns away to get back to sleep.

The Programmer, more than a little miffed, shakes the Engineer and asks, "Well, so what is the answer?" Without a word, the Engineer reaches into his wallet, hands the Programmer $5 and goes back to sleep.

Ramblings From The Editor

By Jerry Gardner, W6UV

Welcome to 1998! The new year promises to be a good one as the solar flux continues to rise and as we continue to thwart all attempts to grab our bands.

Don't forget the club auction next month. Dig out all of that junk that's been accumulating in the garage for the last 30 years and get rid of it. Make your wife happy! I'm looking for old copies of SWL magazines such as *Popular Communications* and *Monitoring Times*, so if you have any, bring them along. Hint, hint.

Times continue to be bad in the ham and SWL marketplace. AEA has been split up and sold piecemeal to several buyers, while EEB and Gilfer, two well-known names in the SWL marketplace, have disappeared recently. You can do your part to keep the industry alive and well by getting out of your rut and trying new bands and modes. As I've said before, there's more to ham radio than 2-meter repeaters.

On the Bleeding Edge...

When the newest version of the Macintosh operating system, MacOS 8.1, was released a few days ago, I knew I had to have it. It wasn't a major upgrade, but it did have a few interesting features I'd been waiting for.

Installing a new version of MacOS is usually a simple affair—unlike the nightmare many Windows users go through when they upgrade. However, this upgrade included support for a new filesystem format, HFS+, which requires reformatting the disk. Of course, HFS+ is completely optional, but I just had to try it. Now.

The first thing to do was to back up everything worth keeping on my disk. This included the files I use to produce the *Carrier* every month. My next step was to format a ZIP removable disk in HFS+ format and install MacOS 8.1 on it. This step was necessary because I didn't have a bootable CD-ROM of 8.1 yet and older versions of MacOS cannot read HFS+ volumes. After I verified I could boot from the newly created ZIP disk, it was time to reformat my hard drive.

Formatting successfully completed, I installed MacOS 8.0 and then updated it to 8.1. Now the smoke test: will it boot? (of course, all of this took place about 4 days before this edition of the *Carrier* was due at the printer...)

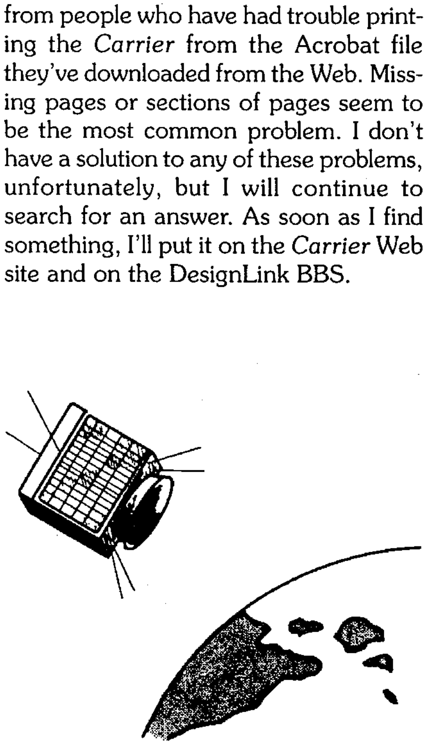
After crossing my fingers and selecting restart, I was rewarded with the smiling Mac icon. Don't try this at home, kids!

Tidbits

Dick Schulze reports that his daughter, Anna Simcox, KE6WPL, was elected to the board of directors of GEARS, the amateur radio club that meets in Chico. Dick's grandson John, KF6KDE, is also a member of GEARS. Both are members of MDARC as well.

Bad Mojo

I've had several complaints recently from people who have had trouble printing the *Carrier* from the Acrobat file they've downloaded from the Web. Missing pages or sections of pages seem to be the most common problem. I don't have a solution to any of these problems, unfortunately, but I will continue to search for an answer. As soon as I find something, I'll put it on the *Carrier* Web site and on the DesignLink BBS.



NETS

W6CX Nets

APRS Net	Tuesdays 1930 Hours 147.060/+ (100 pl) Net Control: Barry, KC6WYA
Phone Net	Thursdays 1930 Hours 147.060/+ (100 pl) Net Control: Jay Caldis, KT6Y
ATV Net	Thursdays 2000 Hours Net Control: Mike Burke, KB6RMT Alternate: Sylvia, KC6YJV
Youth Net	Thursdays 1900 Hours 147.060/+ (100 pl) Net Control: Jeff Burke, KE6YAW

Contra Costa County Emergency Services HF Net

First Thursday following first Wednesday, 2000 Hours, 3.895 MHz. Net Control: Richard Shappee, WA5HQJ

Sheriff's Amateur Radio Communications Team

Clay Yale, N6YBQ
(510) 228-8223

Contra Costa County ARES/RACES Nets

Thursdays, 1900 Hours

Central County	145.680 Simplex Jim Brunk*, N6BHX (510) 372-8248
East County	146.535 Simplex Jim Tittle*, KC6SOE (510) 432-3220
South County	146.355/+ (100 pl) Ed Ritchie*, K6SFD (510) 837-3265
West County	145.110/- Rich Parker*, KD6JCT (510) 237-2777

QSY to 147.735/- at 1920 Hours
Meeting of all County ARES/RACES Nets
Sam Lipson, District Emergency Coordinator, KO6JR
(510) 229-5705

* Assistant District Emergency Coordinator

W6CX Signal Strength Report Form

The Rocky Ridge Repeater Committee is trying to determine how our new antenna location has affected coverage. We would appreciate it if as many members as possible would fill out and return the attached form. If you operate from multiple locations, with multiple radios or antennas or on multiple MDARC repeaters, please copy the form and submit one for each location, radio, antenna and repeater. Please fill it out as completely as possible, but if there is some information you do not know don't let that stop you from sending it in. The more replies we can get the better we will be able to evaluate our coverage and make plans for improving it.

Please send your replies to Jim Brunk, N6BHX. Mailing address: 514 Palms Drive, Martinez, CA 94553. E-mail: brunk@ix.netcom.com or via the DesignLink BBS. This form is also available on the MDARC Web Page and on the DesignLink BBS.

If you are using a "beam" antenna, be sure it's pointed at the top of Mt. Diablo.

Which repeater? 147.060 224.780 441.325

Your location (city and cross streets please):

Height of your antenna above ground:

Type of antenna:

Gain claimed by antenna mfr.:

Length and type of coax (if any):
Type of receiver:

Received signal strength:

Are you using a preamp? If yes, how many dB gain?

Comments? (Please include any pertinent information such as if there is a big hill directly between you and the top of the mountain.)

CALENDAR OF EVENTS

February 9	7:30 pm	MDARC Board Meeting	Baker's Square, Concord
February 20	8:00 pm	MDARC General Meeting	Our Savior's Lutheran Church 1035 Carol Lane, Lafayette
February 28		March *Carrier* Deadline	
March 1	7:00 am-Noon	Livermore Swapmeet	Las Positas College, Livermore 1st Sunday every month
April 5	1:00 pm	Sunnyvale VEC Exams Gene Capener, WW6H, 510-254-5090	Consolidated Fire Training Center 2945 Treat Blvd., Concord 1st Sunday even months

The Carrier
Newsletter of the Mt. Diablo Amateur Radio Club
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MDARC General Meeting February 20